IN THE CLAIMS:

Please cancel claims 37-84; and add new claims 85-99 as follows:

1-84. (Cancelled)

85. (New) A peptide having LPS-binding and -neutralizing activity wherein the peptide is derived from SEQ ID NO: 1; and wherein said sequence is modified by one amino acid substitution selected from the group consisting of:

(i) replacement of Arg at position 1 by one of the D- or L-amino acid residues Ala, Thr, Gln, Asn or Ser;

(ii) replacement of Arg at position 5 by one of the D- or L-amino acid residues Ala, Thr, Gln, Asn or Ser;

(iii) replacement of Arg at position 9 by one of the D- or L-amino acid residues Ala, Thr, Gln, Asn or Ser;

(iv) replacement of Lys at position 10 by one of the D- or L-amino acid residues Ala, Val, Ile, Leu, Phe, Met, Trp or Tyr;

(v) replacement of Ser at position 11 by one of the D- or L-amino acid residues Ala or Val;

(vi) replacement of Phe at position 12 by one of the D- or L-amino acid residues Ala, Thr, Gln, Asn or Ser;

and wherein the peptide optionally comprises extensions of at most four D- or L- amino acid residues at each end of the modified sequence.

86. (New) A peptide according to claim 85, wherein said peptide constitutes the N-terminal region of a larger polypeptide.

87. (New) A peptide according to claim 85, wherein said peptide constitutes the C-terminal region of a larger polypeptide.

88. (New) A peptide according to claim 85, wherein said peptide is inserted into a larger polypeptide.

89. (New) A peptide according to claim 85, wherein at least one amino acid of said peptide is substituted by a non-natural homologous amino acid.

90. (New) A peptide according to claim 86, wherein the N-terminus is modified by acetylation or succinylation.

91. (New) A peptide according to claim 87, wherein the C-terminus is a -OH, -COOH or $-CONH_2$ group.

92. (New) A peptide according to claim 85, wherein said peptide is constrained to adopt a cyclic conformation by an intramolecular disulfide or amide bond.

93. (New) A peptide according to claim 85, wherein the chain backbone of said peptide is substituted by backbone-mimetic organic entities.

94. (New) A peptide according to claim 85, wherein at least one amino acid of said peptide is substituted by alkylation using chemical or enzymatic methods.

95. (New) A peptide according to claim 85, wherein at least one amino acid of said peptide is glycosylated using chemical or enzymatic methods.

96. (New) A peptide according to claim 85, wherein said peptide further comprises a label selected from the group consisting of biotin, radioisotopes, enzymes, colloidal metals or fluorescent, chemiluminescent, or phosphorescent compounds.

97. (New) A linear polypeptide chain containing two or more repeats of a peptide according to claim 85, wherein said repeats of the peptide are connected by 12-25 amino acid linkers, rich in glycine, alanine, proline or serine residues.

98. (New) A linear polypeptide chain containing a combination of two or more peptides according to claim 37, wherein said combination of the peptides is connected by 12-25 amino acid linkers, rich in glycine, alanine, proline or serine residues.

99. (New) An arrangement of three or more peptides according to claim 85, wherein said peptides are linked by their C-terminus to a lysine core structure.